

selected as the network-wide MOE. Table 3-3, Figure 3.11, and Figure 3.12 show the summary results as a function of various VMS response rates. Average travel time in terms of overall network is not dramatically changed depending on the underlying VMS response rates. Average travel time of impacted vehicles, on the other hand, is significantly decreased when the VMS response rate is greater than 15%, but remains quite stable for further increased VMS response rates. The results illustrate that the VMS effects are growing until the VMS usage reaches a certain market penetration rate, however, and from that point, increasing market penetration only generates marginal benefits.

Table 3-3 Average Travel Time (min) in various VMS response rate

VMS response rate	Network wide	Impacted vehicle		
		subtotal	Non-diverted	Diverted
0%	11.7975	37.534	37.534	-
10%	12.5559	37.081	37.404	29.225
15%	11.6043	29.316	29.316	27.164
25%	11.596	29.324	29.347	28.117
30%	11.596	29.347	29.347	28.117
40%	11.4442	28.311	28.346	25.755